

CLAIM AMENDMENTS

Please cancel Claims 6, 55-57, and 60.

1. (Previously Presented) A fiber plate formed by arranging in a mutually adjacent manner a plurality of individual fiber plates of a same thickness so as to provide a light guiding plane larger in area than the light guiding plane of each of said individual fiber plates, wherein:

each of said individual fiber plates is composed of a group of optical fibers having mutually parallel axes;

lateral faces of said adjacent plurality of individual fiber plates are mutually bonded at a bonding portion so that the axes of the optical fibers thereof become mutually parallel; and.

said bonding portion is a radiation intercepting bonding portion.

2. (Previously Presented) A fiber plate according to claim 1, wherein the axes of said optical fibers are parallel or inclined to a line normal to said light guiding plane.

3. (Original) A fiber plate according to claim 1, wherein at least either of said light guiding plane and said lateral face is a polished surface.

4. (Original) A fiber plate according to claim 1, wherein said lateral faces are mutually bonded by at least either of an adhesive material or a metal.

5. - 20. (Cancelled)

21. (Previously Presented) A radiation image pickup apparatus provided with a wavelength converting member for converting radiation into light, a photoelectric converting element for converting the light into an electrical signal, and a fiber plate provided between said wavelength converting member and said photoelectric converting element: wherein

said fiber plate is formed by arranging in a mutually adjacent manner plural individual fiber plates of a same thickness so as to provide a light guiding plane larger in area than the light guiding plane of each of said individual fiber plates;

each of said plural individual fiber plates is composed of a group of optical fibers having mutually parallel axes, and lateral faces of said plural individual fiber plates are mutually bonded so that the axes of the optical fibers thereof become mutually parallel;

said photoelectric converting element includes plural pixels of mutually different light receiving areas; and

the width of the gap between mutually adjacent said individual fiber plates is smaller than the width of a pixel having a smallest light receiving area in said photoelectric converting element.

22. (Cancelled)

23. (Previously Presented) A radiation image pickup apparatus provided with a wavelength converting member for converting radiation into light, a photoelectric converting element for converting the light into an electrical signal, and a fiber plate provided between said wavelength converting member and said photoelectric converting element: wherein

said fiber plate is formed by arranging in a mutually adjacent manner plural individual fiber plates of a same thickness so as to provide a light guiding plane larger in area than the light guiding plane of each of said individual fiber plates;

each of said plural individual fiber plates is composed of a group of optical fibers having mutually parallel axes, and lateral faces of said plural individual fiber plates are mutually bonded so that the axes of the optical fibers thereof become mutually parallel; and

the gap between mutually adjacent said individual fiber plates is positioned on an effective pixel area of a chip constituting said photoelectric converting element.

24. (Previously Presented) A radiation image pickup apparatus provided with a wavelength converting member for converting radiation into light, a photoelectric converting element for converting the light into an electrical signal, and a fiber plate provided between said wavelength converting member and said photoelectric converting element; wherein

said fiber plate is formed by arranging in a mutually adjacent manner plural individual fiber plates of a same thickness so as to provide a light guiding plane larger in area than the light guiding plane of each of said individual fiber plates;

each of said plural individual fiber plates is composed of a group of optical fibers having mutually parallel axes, and lateral faces of said plural individual fiber plates are mutually bonded so that the axes of the optical fibers thereof become mutually parallel; and

a joint line formed by the gap between mutually adjacent said individual fiber plates and a joint line formed by the gap between chips constituting said photoelectric converting element mutually cross with an angle larger than 0 and smaller than 90 .

25. - 31. (Cancelled)

32. (Previously Presented) A radiation image pickup apparatus provided with a wavelength converting member for converting radiation into light, a photoelectric converting element for converting the light into an electrical signal, and a fiber plate provided between said wavelength converting member and said photoelectric converting element:

wherein said fiber plate is formed by arranging in a mutually adjacent manner plural individual fiber plates of a same thickness so as to provide a light guiding plane larger in area than a light guiding plane of each said individual fiber plate;

each of said plural individual fiber plates is composed of a group of optical fibers having axes parallel to the normal line to said light guiding plane;

lateral faces of said plural individual fiber plates are mutually so bonded that the axes of the optical fibers thereof become mutually parallel;

the front and rear surfaces of said fiber plate, constituting light guiding planes thereof, have a same area;

said photoelectric converting element includes plural pixels of mutually different light receiving areas; and

the width of the gap between mutually adjacent said individual fiber plates is smaller than the width of a pixel having a smallest light receiving area in said photoelectric converting element.

33. (Cancelled)

34. (Previously Presented) A radiation image pickup apparatus provided with a wavelength converting member for converting radiation into light, a photoelectric converting element for converting the light into an electrical signal, and a fiber plate

provided between said wavelength converting member and said photoelectric converting element:

wherein said fiber plate is formed by arranging in a mutually adjacent manner plural individual fiber plates of a same thickness so as to provide a light guiding plane larger in area than a light guiding plane of each said individual fiber plate;

each of said plural individual fiber plates is composed of a group of optical fibers having axes parallel to the normal line to said light guiding plane;

lateral faces of said plural individual fiber plates are mutually so bonded that the axes of the optical fibers thereof become mutually parallel;

the front and rear surfaces of said fiber plate, constituting light guiding planes thereof, have a same area; and

the gap between mutually adjacent said individual fiber plates is positioned on an effective pixel area of a chip constituting said photoelectric converting element.

35. (Previously Presented) A radiation image pickup apparatus provided with a wavelength converting member for converting radiation into light, a photoelectric converting element for converting the light into an electrical signal, and a fiber plate provided between said wavelength converting member and said photoelectric converting element:

wherein said fiber plate is formed by arranging in a mutually adjacent manner plural individual fiber plates of a same thickness so as to provide a light guiding plane larger in area than a light guiding plane of each said individual fiber plate;

each of said plural individual fiber plates is composed of a group of optical fibers having axes parallel to the normal line to said light guiding plane;

lateral faces of said plural individual fiber plates are mutually so bonded that the axes of the optical fibers thereof become mutually parallel;

the front and rear surfaces of said fiber plate, constituting light guiding planes thereof, have a same area; and

a joint line formed by the gap between mutually adjacent said individual fiber plates and a joint line formed by the gap between chips constituting said photoelectric converting element mutually cross with an angle larger than 0° and smaller than 90°.

36. - 57. (Cancelled)

58. (Previously Presented) A fiber plate formed by arranging in mutually adjacent manner a plurality of individual fiber plates of a same thickness so as to provide a light guiding plane larger in area than the light guiding plane of said individual one fiber plate, wherein:

each of said individual fiber plates is composed of a group of optical fibers having mutually parallel axes; and

lateral faces of said plurality of individual fiber plates are mutually so bonded that the axes of the optical fibers thereof become mutually parallel, and said lateral face bonded to an adjacent fiber plate is a polished surface.

59. (Previously Presented) A radiation image pickup apparatus comprising a fiber plate according to claim 1.

60. (Cancelled)

61. (Previously Presented) A radiation image pickup apparatus comprising a fiber plate according to claim 58.